

NOTES ON AMERICAN LOGANIACEAE V. KEY TO THE GENERA REPRESENTED IN AMERICA

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INTRODUCTION

After having revised some genera represented in America the present author hopes to complete the revisions of all genera of *Loganiaceae* represented in America, except for *Buddleja*, *Spigelia*, and *Strychnos*. The latter three genera are being studied by, respectively, Dr. Eliane NORMAN, Dr. Homer HURLEY, and Dr. B. A. KRUKOFF. Some of their publications are cited in this paper.

The *Loganiaceae* have been the subject of discussion since the family was established. In the present author's opinion their circumscription should be approximately like that of SOLEREDER (1892) and exactly like that of LEENHOUTS (1962). The family is subdivided into ten tribes, eight of which are represented in America, with 15 genera in all.

KEY TO THE GENERA REPRESENTED IN AMERICA BASED ON SPECIES REPRESENTED THERE

1. Leaves entire or lobed, never sharply pointed 2
 Leaves lobed, with sharply pointed apex and lobes (blade like that of *Ilex aquifolium*). Andes 15. **Desfontainia**
2. Corolla lobes 4 or 5 3
 Corolla lobes 8 or more, contorted; umbranched treelet in the understory of the forest with large leaves; inflorescence large, terminal; plant brittle when dry 14. **Potalia**
3. Calyx without epicalyx 4
 Calyx subtended by some pairs of bracteoles and an epicalyx; trees or shrubs with seemingly umbellate terminal inflorescences . . . 9. **Antonia**
4. Fruit a capsule; secondary leaf veins about equal; plants herbaceous or woody, if climbing without tendrils 5
 Fruit a berry which is often large and thick-walled; leaves mostly triplinerved; plants woody, often huge climbers with hooked tendrils; aestivation valvate 4. **Strychnos**
5. Herbs, sometimes undershrubs (see 3. *Spigelia* with valvate aestivation, usually cincinnal inflorescences, and bilobed capsules) 6
 Woody plants 8

6. Aestivation valvate; capsule bilobed; inflorescence usually cincinnal . . .
 3. **Spigelia**
 Aestivation imbricate; capsule simple or 2-horned; inflorescence dichasial
 only if capsule horned 7
7. Stems repeatedly dichotomously branched; flowers solitary; leaves small,
 linear; capsules ellipsoid 1. **Polypremum**
 Stems unbranched or nearly so; inflorescence dichasial with long cincinnal
 branches; leaves wider; capsules 2-horned 2. **Mitreola**
8. Stigma twice dichotomously branched; corolla tube infundibuliform, out-
 side glabrous or nearly so 9
 Stigma capitate or nearly so; corolla tube cylindrical, if not then outside
 distinctly hairy (see 12. *Buddleja*) 11
9. Inflorescence short, axillary; peduncle very short or obsolete; capsule sim-
 ple. Central and North America. 10
 Inflorescence laxly dichasial, terminal and axillary; peduncle distinct, slen-
 der; capsule bilobed; corolla white with yellow base. South America
 6. **Mostuea**
10. Erect shrub; capsule linear-fusiform; ovary one-celled; corolla violet or
 nearly so. 7. **Plocosperma**
 Twiner; capsule ellipsoid or nearly so; ovary two-celled; corolla yellow
 5. **Gelsemium**
11. Corolla lobes orbicular or nearly so 12
 Corolla lobes narrowly oblong; aestivation valvate; leaves coriaceous
 8. **Bonyunia**
12. Anther cells confluent; inflorescence terminal, many-flowered; leaves gla-
 brous or nearly so 13
 Anther cells discrete; inflorescence terminal and many-flowered or not;
 leaves mostly distinctly hairy 14
13. Corolla persistent; aestivation valvate; stamens 5, exserted. Costa Rica
 to Bolivia 10. **Peltanthera**
 Corolla deciduous, circumscissile; aestivation imbricate; stamens 4, in-
 cluded, and a staminode. Peru 11. **Sanango**
14. Stamens well-exserted; corolla tubular, about 3–4 cm long; leaves with large
 entire lobes. Mexico and Southern United States . . 13. **Emorya**
 Stamens included, or, if exserted, the corolla much smaller . 12. **Buddleja**

LIST OF TRIBES AND GENERA REPRESENTED IN AMERICA
 WITH SOME REFERENCES

Spigeliaceae

1. **Polypremum** L. with one species, *P. procumbens* L., in America.
 SOLEREDER in ENGLER & PRANTL, *Nat. Pflanzenf.* 4 (2): 44, f. 25. A–C. 1892.
2. **Mitreola** L. with 6 species in the tropics and subtropics, two of which in
 America.

LEENHOUTS in *Fl. Males.* 1. 6: 375–377. 1962 (as *Cynoctonum*); HEINE, *Kew Bull.* 23: 251–252. 1969.

3. *Spigelia* L. with about 50 species in America.

LYMAN B. SMITH, *Wrightia* 2 (2): 90–102. 1960; HURLEY, Revision (nearly completed).

Strychnae

4. *Strychnos* L. with about 190 species, about 70 of which in America.

KRUKOFF *et al.*, The American species of *Strychnos*, *Brittonia* 4: 248–322. 1942 with 10 supplements, the last of which in *Phytologia* 19: 176. 1969.

Gelsemieae

5. *Gelsemium* Jussieu with three species, one in Asia and two in North and Central America.

ORNDUFF, The systematics and breeding system of *Gelsemium*, *Journ. Arn. Arb.* 51: 1–17. 1970.

6. *Mostuea* Didi. with 8 species, 7 of which in Africa and one, *M. surinamensis* Benth., in northern South America.

LEEUWENBERG, Revision, *Meded. Landbouwhogeschool Wageningen* 61 (4): 1–31. 1961.

Plocospermeae

7. *Plocosperma* Benth., with one species, *P. buxifolium* Benth. in Central America.

LEEUWENBERG, Revision, *Acta Bot. Neerl.* 16: 56–61. 1967.

Antonieae

8. *Bonyunia* Rich. Schomb. with four species in South America.

LEEUWENBERG, Revision, *Acta Bot. Neerl.* 18: 152–158. 1969.

9. *Antonia* Pohl with one species, *A. ovata* Pohl, in South America.

PROGEL in MARTIUS, *Fl. Bras.* 6: (1): 251, pl. 67. 1868.

Buddlejeae

10. *Peltanthera* Benth. with one species, *P. floribunda* Benth., from Costa Rica to Bolivia.

HUNZIKER & FULVIO, Observaciones morfológicas sobre *Peltanthera*, con referencia a su posición sistemática, *Bol. Acad. Nac. Cienc. Córdoba* 40: 217–228. 1958; LEEUWENBERG, Revision, *Acta Bot. Neerl.* 16: 143–146. 1967.

11. *Sanango* Bunting et Duke with one species, *S. durum* Bunting et Duke, in Peru.

BUNTING & DUKE, *Ann. Mo. Bot. Gard.* 48: 269–274. 1961.

12. *Buddleja* L. with about 100 species, mainly in the tropics and subtropics of the southern hemisphere, about 50 of which in America.

NORMAN, The genus *Buddleja* in North America, *Gentes Herbarum* 10: 1–116. 1967.

13. *Emorya* Torr. with one species, *E. suaveolens* Torr., in Mexico and southern United States.

ELIANE M. NORMAN & RAYMOND J. MOORE, Notes on *Emorya*, *The South-western Naturalist* 13: (2): 137–142. 1968.

Potalieae

14. *Potalia* Aubl. with one species, *P. amara* Aubl., in South America.
PROGEL in MARTIUS, *Fl. Bras.* 6: (1): 267. 1868.

Desfontainieae

15. *Desfontainia* Ruiz et Pavón with one species, *D. spinosa* Ruiz et Pavón in the Andes from Costa Rica to Cabo de Hornos.
LEEUWENBERG, Revision, *Acta Bot. Neerl.* 18: 669–679. 1970.